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Acid-basic properties of 2,2-Bis[(2,4-dihydroxy-3-methyl-aryl)ethyl] methylamine and its interaction with Cu(II)

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Abstract

The acid-basic and complexing properties of the novel compound 2,2-bis[(2,4-dihydrox--3-methyl-aryl)ethyl]methylamine (H4L) in an aqueous isopropyl alcohol (80 vol % (CH3)2CHOH) were characterized by pH metric titration (T = 25 ± 0.1°C) and mathematical simulation of equilibria. The compound forms associates (dimers and tetramers) in the medium under study. The monomeric deprotonated species are accumulated only in a strongly alkaline medium. In an aqueous alcohol, the H4L ligand forms with Cu(II) eight mononuclear complexes, where it can be coordinated through the amino and hydroxo groups. © 2007 Pleiades Publishing, Ltd.

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